

CLAIMS

1. A chromatography column having a column tube and
end filter arrangements which, in use, retain a bed of
particulate chromatography medium in the column tube
between them while allowing the passage of fluid for
chromatography;

at least one of the end filter arrangements being at
the front end of a plunger which is axially slidable along
inside the column tube, makes a seal outwardly against the
tube and incorporates an internal flow conduit
communicating along the plunger between a permeable filter
portion of the respective end filter arrangement and a rear
part of the plunger outside the column tube;

the plunger comprising a tubular stem of glass or
other formable material which defines in one piece said
internal flow conduit, the permeable filter portion being
integrally bonded to the front end of the tubular stem
across the internal flow conduit.

2. A chromatography column according to claim 1 in which
the filter portion is integrally fused to the plunger
stem.

3. A chromatography column according to claim 1 or claim
2 in which both stem and filter portion are of glass or
thermoplastics material.

4. A chromatography column according to claim 1 in which
the tubular stem extends as a one-piece integral whole back
to a rear connection union at the rear of the plunger.

5. A chromatography column according to claim 4 in which the rear connection union has a joint boundary at the exterior of the plunger stem.

5 6. A chromatography column according to any one of the
preceding claims in which an outwardly-directed sealing
portion at or adjacent the front end of the plunger which
makes a seal directly against the column wall, or which
mounts a deformable seal element for making such a seal, is
10 joined to the permeable filter portion via a one-piece
integral instruction.

15 7. A chromatography column according to claim 6 in which
the permeable filter portion is bonded to the plunger's
outer wall by being integrally fused therewith.

20 8. A chromatography column according to any one of the
preceding claims in which the plunger further comprises an
outer plunger wall spaced outwardly from said tubular stem
defining the internal flow conduit, the outer plunger wall
and tubular stem being integrally bonded to one another at
the front end of the plunger so as to seal off an internal
space of the plunger, around said tubular stem, at the
front end.

25 9. A chromatography column according to any one of the
preceding claims in which one end of the column tube has a
full-diameter opening receiving the plunger and the other
end is a closed end, converging to a union for an external
30 fluid flow conduit and having a fixed permeable filter
element across the column tube adjacent the closed end.